TCAP Achievement, Grade 7, Science
Criterion Referenced Test (CRT) Reporting Categories with State Performance Indicators (SPI)

Cell Structure and Function	
SPI#	State Performance Indicator
7.1.1	Recognize basic structures that most cells share (i.e., nucleus, cytoplasm, cell membrane, cell wall, ribosome, mitochondria, chloroplast, vacuole, lysosome).
7.1.2	Identify major cell organelles and their functions.
7.1.3	Distinguish between plant and animal cells.
7.1.4	Sequence a series of diagrams depicting the movement of chromosomes during mitosis.
7.1.5	Determine the relationship among cells, tissues, organs, and systems given a diagram and identify the function of organ systems.
7.1.6	Predict the movement of substances through osmosis or diffusion across the cell membrane, given solutions of different concentrations.
Food Production and Energy for Life	
SPI#	State Performance Indicator
7.3.1	Determine what plants need to make food.
7.3.2	Identify photosynthesis as the food making process in plants.
7.3.3	Select the structures that animals use to obtain oxygen.
7.3.4	Classify animals according to their means of obtaining oxygen.
7.3.5	Select the illustration that depicts the movement of oxygen and carbon dioxide between living things and their environment.
7.3.6	Identify the reactants and products of photosynthesis and respiration.
7.3.7	Associate the processes of photosynthesis and respiration with appropriate cellular organelles.
7.3.8	Interpret a diagram depicting the oxygen-carbon dioxide cycle.
Heredity and Reproduction	
SPI#	State Performance Indicator
7.4.1	Match a flower part with its reproductive function.
7.4.2	Distinguish between sexual and asexual methods of reproduction.
7.4.3	Recognize advantages and disadvantages of sexual and asexual reproduction.
7.4.4	Recognize a variety of pollination methods and associated floral adaptations.
Atmospheric Cycles	
SPI#	State Performance Indicator
7.8.1	Determine how temperature affects evaporation and condensation in the atmosphere.
7.8.2	Identify the detailed features of the water cycle given a diagram (i.e., evaporation, condensation, precipitation, run-off, transpiration).
7.8.3	Analyze data and make predictions about weather given a scenario.
7.8.4	Interpret weather data using a weather map.
Structure and Properties of Matter	
SPI#	State Performance Indicator
7.12.1	Determine the measurable properties of matter and appropriate metric units (i.e., weight, mass, volume, density, size (length, width, height), temperature).
7.12.2	Distinguish between elements, compounds, and mixtures (i.e., Na, Cl, NaCl, C, O_2, CO_2, H_2, H_2O).
7.12.3	Compare the motion and arrangement of molecules in solids, liquids, and gases.
7.12.4	Classify substances as elements or compounds from their symbols or formulas.

SPI# -- Grade Level. Content Standard Number. Performance Indicator Number
Please refer questions about this list to the Tennessee Department of Education, Evaluation and Assessment. 01/08/04